

Sheet 1 of 3FORM PTO-1449 DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
702-010272SERIAL NO.
09/763,822INFORMATION DISCLOSURE STATEMENT
STATEMENT BY APPLICANTAPPLICANT
Thorvald Eelco WALLAART et al.

(Use several sheets if necessary)

FILING DATE
August 27, 1999GROUP 1652
Art Unit Not Yet Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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	AL	9 4 0 0 5 8 4	01/06/1994	WIPO				
	AM							
	AN							
	AO							
	AP							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

JCS	AQ	Brodellus, P. et al., "Metabolic Engineering of Plant Secondary Metabolism: a Tool to Improve the Productivity of Plant Cell Cultures?" Abstract Papers of the American Chemical Society, p. AGFD026, abstract, April 1997
	AR	Woerdenbag, H.J. et al., "Progress in the Research of Artemisinin-Related Antimalarials: an Update", <u>Pharmacy World and Science</u> , Vol. 16, No. 4, pp. 169-180, August 5, 1994
JCS	AS	Van Geldre, E. et al., "State of the art of the Production of the Antimalarial Compound Artemisinin in Plants", <u>Plant Molecular Biology</u> , Vol. 33, No. 2, pp. 199-209, 1997

EXAMINER Tekchand Savdha DATE CONSIDERED 6/10/04

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Sheet 2 of 3

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JES	AQ	Wallaart, T.E. et al., "Bioconversion of Dihydroarteannuic Acid into the New Antimalarial Drug Artemisinin", <u>Pharmacy</u> <u>World and Science</u> , Vol. 16, No. 3, P. C4, abstract, 1994
	AR	Vergauwe, A. et al., "Agrobacterium tumefaciens-mediated Transformation of <i>Artemisia annua</i> L. and Regeneration of Transgenic Plants", <u>Plant Cell Reports</u> , Vol. 15, No. 12, pp. 929-933, 1996
JES	AS	Matsushita, Y. et al., "Cloning and Analysis of a cDNA Encoding Farnesyl Diphosphate Synthase from <i>Artemisia annua</i> ", <u>Gene</u> , Vol. 172, No. 2, pp. 207-209, June 26, 1996

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508	AQ	Brodelius, P., "Metabolic Engineering of Secondary Metabolism in Vanilla Planifolia and Artemisia annua", <u>Book of Abstracts</u> 211 th ACS National Meeting, abstract, March 24-28, 1996
	AR	Park, C. et al., "Expression, Secretion, and Processing of Rice alpha-Amylase in the Yeast <i>Yarrowia lipolytica</i> ", <u>Journal of Biological Chemistry</u> , Vol. 272, No. 11, pp. 6876-6881, 1997
006	AS	Chang, C. et al., "Improvement of Heterologous Protein Prouctivity Using Recombinant <i>Yarrowia lipolytica</i> and Cyclic Fed-Batch Process Strategy", <u>Biotechnology and Bioengineering</u> , Vol. 59, No. 3, pp. 379-385, 1998

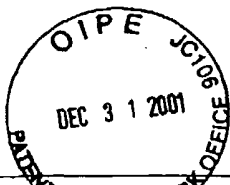
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	AO							
	AP							

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J/8	AQ	Shimada, H. et al., "Increased Carotenoid Production by the Food Yeast <i>Candida utilis</i> through Metabolic Engineering of the Isoprenoid Pathway," <u>Applied and Environmental Microbiology</u> , Vol. 64, No. 7, pp. 2676-2680, July 1998.
	AR	Müller, S. et al., "Comparison of Expression Systems in the Yeasts <i>Saccharomyces cerevisiae</i> , <i>Hansenula polymorpha</i> , <i>Kluyveromyces lactis</i> , <i>Schizosaccharomyces pombe</i> and <i>Yarrowia lipolytica</i> . Cloning of Two Novel Promoters from <i>Yarrowia lipolytica</i> ," <u>Yeast</u> , 14, pp. 1267-1283, 1998.
J/6	AS	Park, C.S. et al., "Expression, Secretion, and Processing of Rice α -Amylase in the Yeast <i>Yarrowia lipolytica</i> ," <u>The Journal of Biological Chemistry</u> , Vol. 272, No. 11, pp. 6876-6881, March 1997.

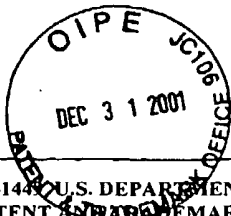
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058	AQ	Tharaud, C. et al., "Secretion of human blood coagulation factor XIIIa by the yeast <i>Yarrowia lipolytica</i> ," <u>Gene</u> , 121, pp. 111-119, 1992.
	AR	Chen, D.-C. et al., "One-step transformation of the dimorphic yeast <i>Yarrowia lipolytica</i> ," <u>Appl. Microbiol Biotechnol</u> , 48, pp. 232-235, 1997.
346	AS	Bohlmann, F. et al., "Cadina-4,11-Diene from <i>Viguiera Oblongifolia</i> ," <u>Phytochemistry</u> , Vol. 23, No. 5, pp. 1183-1184, 1984.

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JCS	AQ	Matsushita, Y. et al., "Cloning and analysis of a cDNA encoding farnesyl diphosphate synthase from <i>Artemisia annua</i> ," <i>Gene</i> , 172, pp. 207-209, 1996.
	AR	Back, K. et al., "Expression of a Plant Sesquiterpene Cyclase Gene in <i>Escherichia coli</i> ," <i>Archives of Biochemistry and Biophysics</i> , Vol. 315, No. 2, pp. 527-532, December 1994.
JCS	AS	Facchini, P. et al., "Gene family for an elicitor-induced sesquiterpene cyclase in tobacco," <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 89, pp. 11088-11092, November 1992.

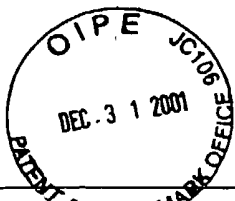
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JES	AQ	Back, K. et al., "Cloning and Bacterial Expression of a Sesquiterpene Cyclase from <i>Hyoscyamus muticus</i> and Its Molecular Comparison to Related Terpene Cyclases," <u>The Journal of Biological Chemistry</u> , Vol. 270, No. 13, pp. 7375-7381, March 1995.
	AR	Omirulleh, S. et al., "Activity of a chimeric promoter with the doubled CaMV 35S enhancer element in protoplast-derived cells And transgenic plants in maize," <u>Plant Molecular Biology</u> , 21, pp. 415-428, 1993.
JES	AS	Vergauwe, A. et al., " <i>Agrobacterium tumefaciens</i> -mediated transformation of <i>Artemisia annua</i> L. and regeneration of transgenic plants," <u>Plant Cell Reports</u> , 15, pp. 929-933, 1996.

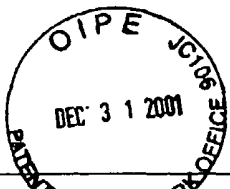
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	AP							

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J/8	AQ	Hohn, T. et al., "Expression of a Fungal Sesquiterpene Cyclase Gene in Transgenic Tobacco," <u>Plant Physiol.</u> , 97, pp. 460-462, 1991.
	AR	Yanisch-Perron, C. et al., "Improved M13 phage cloning vectors and host strains: nucleotide sequences of the M13mp18 and pUC19 Vectors," <u>Gene</u> , 33, pp. 103-119, 1985.
J/8	AS	Rogers, S.G. et al., "Gene Transfer in Plants: Production of Transformed Plants Using Ti Plasmid Vectors," <u>Methods in Enzymology</u> , Vol. 118, pp. 627-640, 1986.

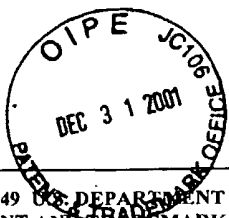
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AQ	1/30	Koepp, A.E. et al., "Cyclization of Geranylgeranyl Diphosphate to Taxa-4(5),11(12)-diene Is the Committed Step of Taxol
	1/3	Biosynthesis in Pacific Yew," <u>The Journal of Biological Chemistry</u> , Vol. 270, No. 15, pp. 8686-8690, April 1995.
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